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The hymenopterous
types of
Peter Cameron
in the Albany Museum,
Grahamstown,
South Africa,
with notes on their condition

Peter Cameron was, throughout his life, a most prolific describer of new species; his published works run into hundreds and he probably described many more hundreds of species. His monograph of British phytophagous Hymenoptera is perhaps his best work. Unfortunately, however, his descriptions leave much to be desired, especially those published towards the end of his life, for very often his work was inclined to be superficial and uncritical. In numerous cases, species which he described were assigned to the wrong genus, or even to the wrong family. All this, as well as his habit of distributing more than one specimen labeled "Type", has been the despair of many subsequent workers. In addition, Cameron does not seem to have been very careful in returning specimens sent to him for naming; in some cases, apparently, sending them back to the wrong individuals or institutions.

In view of all that has been said above, it is thought that a few remarks on those types deposited in the Albany Museum may be of some use to various workers studying Hymenoptera. It may not be inopportune to mention at this stage, that a number of the types, of species described by Cameron, have not been traced up to now. Were these ever returned by Cameron or have they been lost subsequently? It will be noticed that some of the species discussed have been listed as deposited in the Transvaal Museum, Pretoria (see "A list of Zoological and Botanical Types Preserved in Collections in Southern and East Africa"). This confusion arises from the fact that more than one specimen was marked as "Type". Seeing that these particular species were described on specimens sent by, and belonging to, the Albany Museum, it is only logical that the types will be those specimens returned to that institution, no matter what Cameron did with those he retained for his trouble. This means that those specimens returned to the Albany Museum have to be considered as the Holotypes and any other specimens, to use modern terminology, have to be considered merely as Paratypes. Thus some of the Holotypes listed by the Transvaal Museum are in reality Paratypes.

In the list that follows, each specimen has been carefully checked with regard to locality, collector's name, date of collecting and most important of all, whether Cameron's determination label is present, and of course whether this label bears the word "Type". In most cases these specimens have been considered as the Holotypes; in a few cases, however, they have been called Cotypes; this has been done for a special reason. If Cameron's descriptions are studied it will be noticed that he describes some of his species from more than one

locality. When he has done this, in every case the specimen from the first locality mentioned in the particular description is considered as the Holotype, the other specimens being considered as Paratypes, unless no specimen from the first locality is available, in which case the specimen is called Cotype. The main reason for the use of this term is that it is not known whether the other specimen or specimens are still in existence; if these others are not extant then the Albany Museum specimens can be designated as Lectotypes, one for each particular species. In some cases, the term Cotype has been used for specimens that were sent by Father O'Neil and thus were probably merely one of a series from O'Neil's collection, but here again, if no other specimen is in existence, then these may be called Lectotypes.

In listing the names, these have been placed in the family to which Cameron had assigned them, or to its modern equivalent, unless there had been an obvious misplacement. In the latter case, the particular species has been assigned to a family which is considered the correct one. The name given by Cameron is placed first followed by a reference to the original description. This is followed by a description of the various labels, condition of the specimen, and in many cases, a short discussion on synonymy, that is, where the species is placed by modern workers, when this is known, or what specific name should be used in cases of synonymy.

Family TIPHIIDAE.

Sub-family Anthoboscinae.

Odontothynnus lacteipennis Cameron 1904. Rec. Albany Mus., 1 (3): 162. Male.

This specimen has three labels as follows:—

(1) Miss M. Daly & Miss M. Sole Grahamstown IX-03.

(2) 239.

(3) *Odontothynnus lacteipennis* Cam. Type. [In Cameron's handwriting.]

A fourth, red label with HOLOTYPE ♂ *Odontothynnus lacteipennis* Cameron, has been added.

The specimen, which is glued on a card, is in fairly good condition, being complete except for the left fore tarsus and the right hind leg which are missing. The left hind leg is glued separately on the card.

As has been pointed out by Turner on several occasions, the genus *Odontothynnus* Cameron is a synonym of *Anthobosca*, as well as not being a member of the Thynnidae, where placed by Cameron. The genus *Anthobosca* will have to be split up into various genera and sub-genera, and when this is done, *Odontothynnus* will be available for one of the divisions, unless it proves to be a synonym of some other name which at present is considered as a synonym of *Anthobosca*.

Anthobosca lacteipennis (Cameron), the name by which it has to be known for the present, is different from any species as yet described, although closely allied to *bidentata* (Cameron), described in the same paper as the present one. No direct comparison between the two can be made as the type of *Odontothynnus bidentata* is not in the Albany Museum. *O. bidentata* is considered, however, to be the male of *Anthobosca natalensis* Turner, by Turner, Cameron's name having priority.

Plesia melanaria Cameron 1905. Rec. Albany Mus., 1(5):297. Female.

This specimen has three labels as follows:—

(1) Brak Kloof Feb. 1902. Mrs. G. White.

(2) 163.

(3) *Plesia melanaria* Cam. Type Cape Colony. [In Cameron's handwriting].

A fourth, red label with HOLOTYPE ♀ *Plesia melanaria* Cameron, has been added.

The specimen, which is glued on a card, has suffered somewhat, the apical three segments of the right antenna as well as the right eye having been eaten away by *Dermestes*; the right fore tarsus as well as the left hind leg (except for the coxa and the trochanter) are missing.

As suspected by Turner, this is not a *Plesia* at all but another member of the genus *Anthobosca*, fitting very well the description of *A. natalensis* Turner, as well as specimens determined as that species by Turner. Thus *melanaria* becomes a synonym of *Anthobosca bidentata* (Cameron) (*SYN. NOV.*)

As the locality Brak Kloof is mentioned time and again in Cameron's descriptions, and is not shown on maps, it will be helpful to those not familiar with place names in the Eastern Cape Province to know where this place is situated. The name Brak Kloof refers to a farm about nine miles north-west of Grahamstown, on the road to Bedford.

Sub-family Myzininae.

Plesia rufo-femorata Cameron 1905. Rec. Albany Mus., 1(5):298. Male.

This specimen has three labels as follows:—

(1) O'okiep 9.90.

(2) 174.

(3) *Plesia rufo-femorata* Cam. Type Dunbrody. [In Cameron's handwriting].

A fourth, red label with HOLOTYPE ♂ *Plesia rufo-femorata* Cameron, has been added.

The specimen is in very poor condition. Both antennae are broken off, the left with four segments remaining while the right has only one. The legs are fortunately intact except for the apical tarsal segment of the left hind leg which is missing. Both wings on the left side as well as the whole of the gaster are missing.

It is strange that Cameron added Dunbrody to his determination label as this place is not mentioned in his description, the only name given being O'okiep, as on the locality label. These two places are not even close together, O'okiep being in Namaqualand whereas Dunbrody is in the Sundays River Valley in the Eastern Cape Province.

The present species cannot be placed in *Plesia*, a synonym of *Myzinum* Latreille, a purely New World genus. For the Old World species de Saussure proposed the name *Mesa* and thus *rufo-femorata* has to be placed in de Saussure's genus. The present specimen is the same as the species so named (*rufo-femorata*) by Turner in his works on this family of Hymenoptera.

Plesia reticulata Cameron 1905. Rec. Albany Mus., 1(5):300. Male.

This specimen has two labels as follows:—

(1) Brak Kloof Jan. 95 Mrs. G. White.

(2) *Plesia reticulata* Cam. Type Brak Kloof. [In Cameron's handwriting.]

A third, red label with HOLOTYPE ♂ *Plesia reticulata* Cameron *teste* C. J. Guillaumod, has been added.

The specimen, glued on a card with the gaster separately glued on a card below it, is in poor condition. Both antennae are missing, only three segments on the left and one on the right, remaining. The right fore leg is missing as well as the tarsus of the right middle leg. Part of the thorax, at the base of the left pair of wings, has been eaten away and the left fore wing is missing.

This is another species which belongs to the genus *Mesa*. It is very close to, if not identical with, *Mesa xanthocera* (Gerst.); further study of more material from the type locality will be the only way of finally settling the identity of the species.

Myzine (Meira) violaceipennis Cameron 1905. Rec. Albany Mus., 1(5):301. Female.

This specimen has three labels as follows:—

(1) Brak Kloof Jan. 1901 Mrs. G. White.

(2) 227.

(3) *Myzine violaceipennis* Cam. Type. [In Cameron's handwriting.]

A fourth, red label with HOLOTYPE♀ *Myzine (Meira) violaceipennis* Cameron, has been added.

The specimen is in fairly good condition, with the following parts missing:—Three segments on the left and nine on the right antenna; the apical segment of the left fore tarsus as well as three segments of the right hind tarsus.

As already mentioned, *Myzine*, or more correctly *Myzinum*, cannot be used for South African species as it is purely a New World genus. The species under discussion is a typical *Meria*, a name consistently misspelt *Meira* by Cameron. The study of the type confirms Turner's opinion that *violaceipennis* is a synonym of the widely distributed *Meria rufifrons* (Fabricius). Cameron compares his species with *klugii* (Westwood), a species only distantly related which belongs to the subgenus *Macromeria*. This species should, thus, be known as *Meria rufifrons* (Fabricius).

Plesia continua Cameron 1905. Rec. Albany Mus., 1(5):299. Male.

This specimen has four labels as follows:—

(1) Brak Kloof Farm March 93. Mrs. G. White.

(2) 171.

(3) *Plesia continua* Cam. Type Cape Colony. [In Cameron's handwriting.]

(4) According to Brauns this is a *Myzine*.

A fifth, red label with HOLOTYPE♂ *Plesia continua* Cameron, has been added.

This species is also a member of the genus *Meria*. Turner placed *continua* as a synonym of *abdominalis* Guérin, considering Cameron's species as the male of Guérin's species. For the present at least, they are being kept separate as there are more species involved than had been realised by Turner, and it seems very likely that *continua* is a valid species which has to be known as *Meria continua* (Cameron).

The specimen is in perfect condition except for the left antenna which has five segments missing.

Plesia interrupta Cameron 1905. Rec. Albany Mus., 1(5):318. Male.

This specimen has three labels as follows:—

(1) Dunbrody.

(2) *Plesia interrupta* Cotype Cam. [Not in Cameron's handwriting but probably in Father O'Neil's.]

(3) According to Brauns this is a *Myzine*.

A fourth, green label with COTYPE♂ *Plesia interrupta* Cameron, has been added.

The specimen is in rather poor condition; only the basal segment of the gaster remains. The right hind tarsus is also missing.

This is another species which does not belong to *Plesia* but to *Meria*. It is not clear whether this specimen has even the right of being called a Cotype, as it does not have a determination label written by Cameron. It may simply be a specimen retained by O'Neil as the same as one sent to Cameron for naming. As the name *interrupta* is preoccupied in the genus *Myzinum*, of which *Plesia* is a synonym, Schultz has renamed it *discontinua*. This species should thus be known as *Meria discontinua* (Schultz).

Family POMPILIDAE

(Ceropalidae of Cameron)

Salius (Mygymia) Pringleae Cameron 1905. Rec. Albany Mus., 1(4):221. Female.

This specimen has four labels as follows:—

(1) Kokstad May 02. Mrs. Pringle.

(2) 185.

(3) *Mygymia Pringlei* Cam. Type Kapstad. [In Cameron's handwriting.]

(4) *Cyphononyx bruneiceps* Tasch. var. *Pringleae* det A. G. Arnold.

A fifth, red label with HOLOTYPE ♀ *Salius* (*Mygymia*) *Pringleae* Cameron, has been added.

The specimen is in good condition, although it has the following parts missing:—Ten segments of the left antenna; two segments of the left fore tarsus; the left middle leg as well as both hind legs have their tarsi missing except for the basal segment.

This species is now placed in the genus *Hemipepsis*. Arnold (1932:346) considers it to be a variety of *bruneiceps* (Tasch. 1869). He also places *tinctor* (Sauss. 1867) as a variety in spite of its having priority, as pointed out by Pate (1946:97). If one accepts the name as a varietal one, then it will have to be known as *Hemipepsis tinctor* var. *pringleae* (Cameron).

Salius* (*Cyphononyx*) *spilostomus Cameron 1905. Rec. Albany Mus., 1(4):222. Male.

This specimen has four labels as follows:—

(1) Brak Kloof Farm Ap. 91, and on the reverse side, Mrs. G. White.

(2) 187.

(3) *Salius spilostomus* Cam. Type Brak Kloof. [In Cameron's handwriting.]

(4) *Cyphononyx optimus* Smith det G. Arnold.

A fifth, red label with HOLOTYPE ♂ *Salius* (*Cyphononyx*) *spilostomus* Cameron, has been added.

The specimen is in good condition except for the following parts which are missing:—All the antennal segments except the basal three on the left antenna; left fore leg, tibia and tarsus; apical tarsal segment of the right middle leg; tibiae and tarsi of both hind legs. The left eye is dented in.

This species is a synonym of *Cyphononyx optimus* (Smith), a widely distributed species in Africa.

Salius* (*Cyphononyx*) *Schönlandi Cameron 1905. Rec. Albany Mus., 1(4):223. Female (not male as stated by Cameron).

This specimen has three labels as follows:—

(1) Gr Town. 1897 Dr. Becker.

(2) *Cyphononyx Schönlandi* Cam. Type Grahamstown. [In Cameron's handwriting.]

(3) *Cyphononyx optimus* Smith det G. Arnold.

A fourth, red label with HOLOTYPE ♀ *Salius* (*Cyphononyx*) *Schönlandi* Cameron, has been added.

The specimen is in good condition, except for the following parts which are missing:—Four segments of the right antenna; apical tarsal segment of both front legs as well as that of the left middle leg; apical three segments of both hind legs.

There is a slight possibility that the present specimen may not be the true holotype in that Cameron says that the species is based on a male collected by Dr. Penther in June whereas our specimen is a female collected by Dr. Becker without the month of collecting. The sex is thought not to be of very great importance as Cameron very often gives the wrong sex. The other discrepancies are not so easy to explain away, especially the month of collecting. What could have happened, of course, is that the original specimen was destroyed and the determination label was placed on some other specimen that was in the collection.

There is no doubt that the specimen dealt with here, is yet another specimen of *Cyphononyx optimus* (Smith). It may be added here that Arnold in his monograph (1932:298) synonymises four of Cameron's names under *optimus*, the two mentioned here as well as two species from Central Africa.

Pseudagenia capicola Cameron 1905. Rec. Albany Mus., 1(4):215. Female.

This specimen has three labels as follows:—

(1) Brak Kloof Mar. 95 Mrs. G. White. [This label is very faded].

(2) 204.

(3) *Pseudagenia capicola* Cam. Type Brak Kloof. [In Cameron's handwriting.]

A fourth, red label has been added, with HOLOTYPE ♀ *Pseudagenia capicola* Cameron.

The specimen is in rather poor condition, with the following parts missing:—Right antenna; two tarsal segments of the left fore leg and one on the right fore leg; apical tarsal segment of the right middle leg; tibia and tarsus of the right hind leg as well as the whole of the left hind leg except the coxa; left hind wing except the base. The gaster is glued on to the rest of the insect, apparently having been broken off.

Arnold simply quotes the original description, not having seen the type. The present species appears to be the same as, or very close to, *Pseudagenia circulifera* Arnold. It is almost certainly the same as the slight variety from Jeffrey's Bay, Cape Province, mentioned by Arnold (1934:318) in his original description. At this stage, it is thought inadvisable to synonymise Arnold's species under Cameron's as they may turn out to be very closely allied species, or perhaps races of the same species.

Salix (Priocnemis) spilocephalus Cameron 1905. Rec. Albany Mus., 1(4):222. Female (not male as stated by Cameron).

This specimen has four labels as follows:—

(1) Brak Kloof Farm Ap. 91 [and on the reverse] Mrs. White G.T.

(2) 202.

(3) *Priocnemis spilocephalus* Cam. Type. [In Cameron's handwriting.]

(4) *Pseudagenia spilocephalus* det G. Arnold.

A fifth, red label with HOLOTYPE ♀ *Salix (Priocnemis) spilocephalus* Cameron, has been added.

The specimen is in rather poor condition with the following parts missing:—Tibia and tarsus of the right fore leg; the femur, tibia and tarsus of the right middle leg; one tarsal segment of the left hind leg; the whole of the right hind leg except the coxa; the left fore wing. The right half of the thorax is covered with glue, apparently to hold the right fore wing in place. The gaster is glued in place, having been broken off.

This species is without doubt a member of the genus *Pseudagenia* as used by Arnold (1934:290). This is another case in which Cameron has mis-sexed a specimen. Arnold (1934:331) gives the reference to Cameron's original description as being that of female, with no comment, although only the male is mentioned by Cameron. This species has to be called *Pseudagenia spilocephala* (Cameron) for the present, at least. Some workers on the group have split up this genus into a number of genera, and, if their classification is followed, the present species may have to be placed under another generic name. This applies to various species now placed under the name *Pseudagenia*.

Pseudagenia kloofensis Cameron 1905. Rec. Albany Mus., 1(4):214. Female.

This specimen has three labels as follows:—

(1) Brak Kloof Mrs. G. White Feb. 1902.

(2) 220.

(3) *Pseudagenia kloofensis* Cam. Type Brak Kloof. [In Cameron's handwriting.]

A fourth, red label with HOLOTYPE ♀ *Pseudagenia kloofensis* Cameron, has been attached.

This specimen, glued on a card, is in fairly good condition with the following parts missing:—Nine segments of the left antenna; four and three tarsal segments of the left and right hind legs, respectively.

Arnold (1934:381) indicates that he has seen the type of this species although it does not have one of his determination labels. This species has been made the type of *Cyemagenia* Arnold (Arnold, 1934:380), thus it has to be known as *Cyemagenia kloofensis* (Cameron).

Salius (Cyphononyx) erythrostomus Cameron 1905. Rec. Albany Mus., 1(4):224. Female.

This specimen has four labels as follows:—

- (1) Brak Kloof Ap. 94 Mrs. G. White.
- (2) 197.
- (3) *Salius erythrostomus* Cam. Type Brak Kloof. [In Cameron's handwriting].
- (4) *Clavelia erythrostoma* det. G. Arnold.

A fifth, red label with HOLOTYPE ♀ *Salius (Cyphononyx) erythrostomus* Cameron, has been added.

The specimen is in rather poor condition, the gaster having become detached and pinned separately onto Cameron's determination label. The following parts are missing:—The left fore tibia and tarsus; the apical right tarsal segment; the apical right middle tarsal segment; the tibia and tarsus of the left hind leg as well as four tarsal segments on the right hind leg. The wings are somewhat worn, especially the left fore wing.

This species has been synonymised under *Paraclavelia crudelis* (Smith) by Arnold (1932:69) and is without doubt identical with all specimens of *crudelis* so named by Arnold in various collections which have been studied.

Salius Whiteanus Cameron 1905. Rec. Albany Mus., 1(4):220. Female, not a male as stated by Cameron.

This specimen has three labels as follows:—

- (1) B. Kloof 1903 Mrs. G. White.
- (2) *Salius whiteanus* Cam. Type Brak Kloof. [In Cameron's handwriting].
- (3) gen. *Trichosalius* Arn. *whiteanus* Cam. det. G. Arnold.

A fourth, red label with HOLOTYPE ♀ *Salius Whiteanus* Cameron, has been added.

The specimen is in fairly good condition. The left pair of wings is glued separately on a card below the specimen. The following parts are missing:—Two segments of the right fore tarsus; the apical segment of the right middle tarsus; three segments on both hind tarsi.

One notices two discrepancies when one compares this specimen with the original description of *Salius Whiteanus*; firstly, the present specimen is a female and not a male; secondly, Cameron gives the date of collecting as November with no year, whereas on the specimen simply the year is given. In so many cases Cameron gives the wrong sex, that this does not appear to be very serious. The other difference is hard to explain.

This species is placed by Arnold (1936:115) in the genus *Trichosalius*, and he points out that it is very close indeed to *Trichosalius nitidiventris* Arnold, the type species of the genus, described from Algoa Bay, the description being based on a unique female. It is very likely that, when more specimens are studied, the two supposed species will have to be merged, and as the present name has priority the species will be known as *Trichosalius whiteanus* (Cameron).

Microphadnus bicolor Cameron 1905. Rec. Albany Mus., 1(4):213. Female.

This specimen has three labels as follows:—

- (1) G.T. Feb. 02 Dal M.Sol [the label is cut off at the side, removing what was obviously the y in Daly and the e in Sole].
- (2) 222.
- (3) *Microphadnus bicolor* Cam. Grahamstown. [In Cameron's handwriting].

A fourth, red label has been added with HOLOTYPE ♀ *Microphadnus bicolor* Cameron, teste C. Jacot-Guillarmod.

The specimen, glued on a card, is in very poor condition. The head is glued separately

as well as the wings. The following parts are missing:— One antenna; one fore wing; two and three segments of the left and right middle tarsi respectively; the apical four tarsal segments of the hind legs, in addition to which the right hind leg is glued separately.

It is difficult to decide whether the present specimen is the true holotype as it does not have the word "type" on Cameron's label nor does it have one of Arnold's determination labels, in spite of Arnold mentioning (1937:68) that the type is in the Albany Museum. If this specimen is not the one seen by Arnold then the true type must have been destroyed after having been seen by that worker, which appears unlikely, as all the other types he had seen are accounted for. It is more likely that, as no change of name was required, Arnold decided against the addition of an extra label. This, however, does not prove that it is the type, as Cameron has not written type on his label. There are two alternatives to follow:— (1) to consider that this specimen is in actual fact the type on which Cameron based his description and that he merely forgot to include the word type on his label; (2) that the true type is lost, and thus this species requires a neotype. If a neotype is required, the obvious choice would be the specimen under discussion, as it was at least seen by Cameron and in addition is topotypical. In the above alternatives the same specimen would be considered as the type, whether holotype or neotype, and it has been thought more convenient to accept the above specimen as the holotype of *Microphadnus Bicolor*. If at a later date some other specimen is discovered which has prior claim to being called the holotype, the position can then be reviewed and the error corrected.

Anoplius Soleanus Cameron 1905. Rec. Albany Mus., 1(4):217. Female.

This specimen has four labels as follows:—

- (1) Miss M. Daly and Miss M. Sole Grahamstown May 03.
- (2) 218.
- (3) *Anoplius soleanus* Cam. Type Grahamstown. [In Cameron's handwriting].
- (4) *Paraferreola* (sg. *Eoferreola* Arn.) *Soleana* Cam. det. G. Arnold.

A fifth, red label has been added with HOLOTYPE ♀ *Anoplius Soleanus* Cameron.

The specimen, glued on a card, is in surprisingly good condition. No appendages are missing and it is almost free from dirt.

According to Pate's synopsis of Pompilid genera this species has to be known as *Eoferreola* (*Eoferreola*) *soleana* (Cameron) as the generic name *Paraferreola* is not applicable for this group of insects.

Microphadnus ? fuscipennis Cameron 1905. Rec. Albany Mus., 1(4):213. Male.

This specimen has two labels as follows:—

- (1) *Telostegus fuscipennis* Cam. ♂ det G. Arnold.
- (2) *Microphadnus fuscipennis* Cam. Type. Grahamstown. [In Cameron's handwriting].

A third, red label has been added with HOLOTYPE ♂ *Microphadnus ? fuscipennis* Cameron.

The above specimen is in poor condition, the following parts being lost:— one antenna; both front legs (except the coxae); the left middle tarsus; three segments of the right middle tarsus; and two tarsal segments of the right hind leg.

This species is placed by Arnold (1937:35) in the genus *Telostegus* with no comments except comparisons with a newly described species. Whether the present form is congeneric with the type species, from Europe, can only be decided after comparison, although the description appears to fit this insect very well.

Planiceps ruficaudis Cameron 1905 Rec. Albany Mus., 1(4):214. Female.

This specimen has three labels as follows:—

- (1) G.T. [Grahamstown] VIII 91 [could perhaps be 01]. Dr. Becker.
- (2) 226.
- (3) *Planiceps ruficaudis* Cam. Type Grahamstown. [In Cameron's handwriting].

A fourth, red label has been added with HOLOTYPE. *Planiceps ruficaudis* Cameron.

This carded specimen is in good condition. All parts are present and in position except for one fore wing which is glued separately on the card. In addition the specimen is somewhat dusty.

It should be noted that the specimen does not have one of Arnold's determination labels although he mentions in his monograph (1935:472) that the type is to be found in the Albany Museum. Arnold places this species in the genus *Homonotus*, in which it fits very well and it should thus be known as *Homonotus ruficaudis* (Cameron).

Anoplius (Pompilogastra ?) erythrouus Cameron 1905. Rec. Albany Mus., 1(4):219. Female and male.

Under this name there are two specimens with type labels, a female and a male. These have the following labels:—

Female: This has four labels.

(1) Brak Kloof Jan. 95. Mrs. G. White.

(2) 178.

(3) *Pompilogastra ? erythroua* Cam. Type Brak Kloof. [In Cameron's handwriting.]

(4) *Psammochares ignitus* Smith ♂ det G. Arnold.

A fourth, red label has been added with LECTOTYPE. *Anoplius (Pompilogastra ?) erythrouus* Cameron. *Teste* C. Jacot-Guillarmod.

Male: This has two labels.

(1) *Pompilogastra ? erythroua* Cam. Type Cape Colony. [In Cameron's handwriting.]

(2) *Psammochares ignitus* SMITH ♂ det. G. Arnold.

A third, red label has been added with ALLOTYPE. *Anoplius (Pompilogastra ?) erythrouus*.

The female has been selected as lectotype for the simple reason that it has a locality label attached to it, whereas the male has no locality label except that which was added by Cameron as a determination label on which is the vague locality Cape Colony.

The condition of the specimens is as follows:—

Female: The following parts are missing: The left antenna, except the scape; the two apical segments of the right antenna; the left fore-leg, except for the coxa and the trochanter; the apical tarsal segment of the left middle leg; the whole of the right middle leg, except for the coxa and the trochanter; the tarsus of the left hind leg; the tibia and tarsus of the right hind leg.

Male: The following parts are missing: The left antenna; the apical eight segments of the right antenna; four tarsal segments of the left hind leg as well as the apical one on the right hind leg.

As suspected by Cameron, this species is the same as *ignitus* of Smith, which is placed in the genus *Afropompilus* by Arnold (1936:107). Evans, however, places the genus *Afropompilus* Arnold as a synonym of *Tachypompilus* Ashmead, a genus in which Arnold had originally placed his *Afropompilus* as a subgenus. As no exotic species are available for comparison, especially the type species of *Tachypompilus*, it is perhaps advisable to use the combination *Afropompilus ignitus* (Smith) Arnold, until the status of *Afropompilus* can be settled. As matters stand at the moment *Afropompilus* may be one of three things:— a separate genus, a subgenus of *Tachypompilus* or a synonym of the latter.

Anoplius Dalyanus Cameron 1905. Rec. Albany Mus., 1(4):218. Male.

This specimen has four labels as follows:—

(1) Miss M. Daly and Miss M. Sole Grahamstown II 03.

(2) 226.

(3) *Anoplius dalyanus* Cam. Type Grahamstown. [In Cameron's handwriting.]

(4) *Epiclinotus (Haupt) dalyanus* Cam. det. G. Arnold.

A fifth, red label has been added with HOLOTYPE ; *Anoplius Dalvanus* Cameron.

The specimen is in perfect condition except for both fore wings being glued separately on the card on which the specimen is pinned.

In his monograph (1936:122) Arnold names this species *Epiclinotus dalyanus*; it, however, does not fit very well in the genus *Epiclinotus*, some characters coming nearer to the genus *Homonotus*. Until more specimens are known, especially both sexes, it is better to leave it in the genus *Epiclinotus* where it has been placed by Arnold.

Pompiliodes Beckeri Cameron 1905. Rec. Albany Mus., 1(4):220. Male.

This specimen has three labels as follows:—

(1) GrTown [Grahamstown] 1902 Dr. Becker.

(2) *Pompiliodes Beckeri* Cam. Type Grahamstown. [In Cameron's handwriting.]

(3) *Paracyphononyx (Homonotus) zonatus* Illiger (Variety) det G. Arnold.

A fourth, red label has been added with HOLOTYPE ; *Pompiliodes Beckeri* Cameron.

The specimen is in fairly good condition, only the following appendages are missing: Ten segments of the left antenna; the apical segment of the right middle tarsus; the apical tarsal segment of the left hind leg as well as the whole tarsus of the right hind leg.

This specimen is without doubt *Paracyphononyx zonatus* Illiger, a widely distributed species found in most parts of Southern Africa.

Anoplius whiteanus Cameron 1905. Trans. S. Afr. Phil. Soc., 15(4):228. Male.

This specimen has only one label, in Cameron's handwriting, as follows:—

Anoplius whiteanus Cam. Type Cape Colony.

A second, red label has been added with HOLOTYPE ; *Anoplius whiteanus* Cameron.

The specimen is in poor condition, part of the thorax being broken away by the pin; both antennae are missing except three segments on the left side; one middle leg and both hind legs are missing except for their coxae and trochanters. The wings are very dirty and most of the vestiture is caked with dirt.

Another specimen, also with a determination label of Cameron, is in the collection. The label is the same as for the above specimen except that it does not have the word "type" on it. This is unfortunate as this specimen is in much better condition than the one mentioned above, and in addition appears to be the one seen by Arnold. This latter fact is borne out by an additional label as follows: A *Paracyphononyx (P. lukombensis)* Cam. 1912 is a synonym) det G. Arnold.

In his monograph (1936:441) Arnold synonymises this species under *Paracyphononyx metemmensis* (Magr.). The condition of the specimens makes it very difficult to be certain of one's determination and until the genitalia have been extracted this question cannot be settled with any amount of certainty. It is felt, however, that for the present at least *whiteanus* may conveniently be considered a synonym of *metemmensis*, thus burying a name which would probably remain as an uncertain species in the classification of this genus.

Anoplius Leppani Cameron 1905. Rec. Albany Mus., 1(4):216. Female.

This specimen has four labels as follows:—

(1) Glen Lynden Dec. 03 Miss Leppan.

(2) 198.

(3) *Anoplius Lippani* [Sic!] Cam. Type Glen Lyndon [Sic!]. [In Cameron's handwriting.]

(4) *Batozonus Lippani* [Sic!] det G. Arnold.

A fifth, red label has been added with HOLOTYPE *Anoplius Leppani* Cameron.

The specimen is in fair condition, with the following parts missing: Nine segments of the left and four of the right antenna; three segments of each fore tarsus; three segments of the right middle tarsus; four segments of the left and one of the right hind tarsus.

This species is placed as a synonym of *Batozonellus capensis* (Dahlbom) by Arnold (1937:6) and is certainly the same as all specimens seen which have been so named by Arnold. This species is widely distributed in Africa, being known from Abyssinia to the Cape Province.

Family VESPIDAE

Smithia ? rufipes Cameron 1905. Trans. S. Afr. Phil. Soc., 15(4):230. Male.

This specimen has one label as follows, in Cameron's handwriting:—

Smithia rufipes Cam. Type Brak Kloof Mrs. White.

A second, red label has been added with HOLOTYPE ; *Smithia ? rufipes* Cameron.

The specimen is complete except for the hind legs, the left having no tibia and tarsus and the right having only the coxa present. The left fore wing has been partly torn off, the detached portion being glued on a card placed below the specimen, on the pin.

Bequaert (1918:274) places this species in the genus *Labus*, suggesting that it may be a synonym of *Labus natalensis* (Saussure).

Eumenes rufolineata Cameron 1905. Rec. Albany Mus., 1(4):206. Male

This specimen has only one label, in Cameron's handwriting, with the following data on it:—

Eumenes rufolineata Cam. Type Dunbrody.

A second, green label has been added with COTYPE ; *Eumenes rufolineata* Cameron.

The specimen is in very poor condition. The gaster is missing and the head has been glued onto the thorax. In addition both hind legs are missing.

Cameron states that the species is based on the male. This may be so, but there are so many cases in which he gives the wrong sex in his description that this is no criterion. If Cameron is correct in his sexing, the head of the present specimen belongs to some other insect, as it distinctly belongs to a female, this being shown by the antennae and the colour of the clypeus. Brak Kloof is given as the first locality in the original description, so there is a possibility that this specimen is a female, and the Brak Kloof one is the actual specimen used by Cameron for his description, and in consequence a male. This uncertainty as to the sex of the specimen has been the main reason for labelling it as a male, in spite of the head being that of a female. Further, it is considered only a cotype because its locality is mentioned after Brak Kloof. If the latter specimen is lost then this will automatically become the lectotype.

Family SPHECIDAE

Cerceris nobilitata Cameron 1905. Trans. S. Afr. Phil. Soc., 15(4):216. Female.

This specimen has three labels as follows:—

(1) Dunbrody. [Presumably in Father O'Neil's handwriting.]

(2) 263.

(3) *Cerceris nobilitata* Cam. Type. [In Cameron's handwriting.]

A fourth, red label has been added with HOLOTYPE ; *Cerceris nobilitata* Cameron.

The specimen is in good condition.

The locality label makes it obvious that this specimen was collected by Father O'Neil, and therefore one would think that the type would be together with the other types in the O'Neil collection, which is not in the Albany Museum. This specimen, however, is considered as the holotype for two reasons: (1) the number 263 is printed in the same manner as all the others on specimens sent to Cameron by the Albany Museum. It would thus appear that this specimen, although collected by O'Neil, was not sent to Cameron by him but by the Albany Museum; (2) Brauns (1926:313) mentions that the type is in the Albany Museum.

This latter point does not carry much weight as Brauns may have simply taken it to be the type, seeing it bears a label with the word "type" on it. Under the circumstances, it is thought best to consider the above specimen as the holotype, at least until some other specimen can be proved to have prior claim to this title.

Cerceris whiteana Cameron 1905. Trans. S. Afr. Phil. Soc., 15(4):225. Female.

This specimen has two labels as follows:—

- (1) B. Kloof 1893 Mrs. G. White Brak Kloof [on reverse side].
- (2) *Cerceris whiteana* Cam. Type. [In Cameron's handwriting.]

A third, red label has been added with HOLOTYPE. *Cerceris whiteana* Cameron.

The specimen is complete except for the right fore wing which is missing.

Brauns (1926:336) considers this species as a synonym of *Cerceris spinicaudata* Cameron, a widely distributed species in Southern Africa.

Hoplilus Whitei Cameron 1905. Rec. Albany Mus., 1(4):210. Male.

This specimen has three labels as follows:—

- (1) 248.
- (2) Brak Kloof IV-01 Mrs. G. Whi [When the label was cut part of the writing was cut away.]
- (3) *Hoplilus whitei* Cam. Type Cape Colony. [In Cameron's handwriting.]

A fourth, red label has been added with HOLOTYPE. *Hoplilus Whitei* Cameron.

Below this there is another label with the following written on it:— *H(Gorytes)thalia* Handl. fide Brauns. [It is not known in whose handwriting this last label is.]

This name does not appear in Arnold's monograph of the Sphegidae but is to be found in Mädl and Klima (Hym. Cat., 8:89, 1939) as a good species. According to Arnold's classification, *whitei* would come into the genus *Gorytes*. Mädl and Klima place it in the subgenus *Hoplisoides*, together with *thalia* Handl. From the above transcriptions of the labels it is evident that Brauns had seen the specimen and considered it conspecific with *thalia*. No exhaustive comparisons have yet been made between this specimen and males of *thalia*, but all indications point to *whitei* being a synonym of *thalia* or a species very close to it.

Ampulex spilopectera Cameron 1905. Rec. Albany Mus., 1(4):254. Female.

This specimen has three labels as follows:—

- (1) Dunbrody 1/3/01.
- (2) *Ampulex spilopectera* Cameron Cotyp. [Not in Cameron's handwriting].
- (3) — colour variety of *nigrocoerulea* Sauss with coarser puncturation on head and mesonotum det G. Arnold.

A fourth, green label with COTYPE ♀ *Ampulex spilopectera* Cameron, has been added.

The specimen is in good condition except for the following parts which are missing:— half the femur, the tibia and the tarsus of the left middle leg; the tarsus of the left hind leg.

There is a possibility that Cameron never saw this specimen seeing that the det. label is not in his handwriting. There is the possibility also that he returned more than one specimen to Father O'Neil, having labelled only one of them, and when the latter donated the unlabelled specimen to the Albany Museum, a label was added to make it clear that the specimen was one of the type-series. It is not known whether the holotype of this species is still in existence, if not then this specimen could either be selected as lectotype or neotype, depending on whether it can be proved that Cameron saw the specimen or not.

Ammophila erythrospila Cameron 1905. Rec. Albany Mus., 1(5):303. Male.

This specimen has three labels as follows:—

(1) Glen Lynden Jan 02 Miss Leppan.

(2) 214.

(3) *Ammophila erythrospila* Cam. Type Cape Colony. [In Cameron's handwriting.]

A fourth, green label has been added with COTYPE ♂ *Ammophila erythrospila* Cameron.

The specimen is in poor condition. Both antennae have only three segments left, while both fore legs are broken off, leaving only the left coxa and the right coxa and femur. The right hind leg has the tarsus broken off, while the gaster is completely missing except for the petiole.

The above specimen is not considered the holotype due to the fact that the first locality mentioned in the original description is Table Farm, the above mentioned locality being mentioned in second place. It is not known where the Table Farm specimen is, if still in existence. If it should prove to be lost then this specimen may be considered as the lectotype.

Arnold (1928:276) considers this species as a synonym of *Ammophila bonae-spei* var. *ferrugineipes* Lepeletier, a widely distributed form. It should be noted that the generic name *Sphex* is used by Arnold in his monograph for this genus. *Ammophila* has now, however, been placed in the official list of generic names. It is thus a pity that some American workers still insist on using *Sphex* for this genus and not for that for which Arnold used the name *Chlorion* in his monograph. This inconsistency is causing a lot of confusion among workers on the Sphecinae.

Palarus lineatifrons Cameron 1905. Trans. S. Afr. Phil. Soc., 15(4):213. Female.

This specimen has three labels as follows:—

(1) Somerset East VI-01. Mrs. G. White.

(2) 229.

(3) *Palarus lineatifrons* Cam. Type Cape Colony. [In Cameron's handwriting.]

A fourth, red label has been added with HOLOTYPE ♀ *Palarus lineatifrons* Cameron.

In addition to the above there is another label with the following on it: *P. latifrons* Kohl fide Brauns.

The specimen is in poor condition. Both the antennae are missing. The right side of the thorax has been eaten away. There is no tarsus on the left middle leg while the right leg is completely missing. The left hind leg is broken off at the coxa.

Arnold (1923:5) places this species as a synonym of the common Banded Bee-pirate (*Palarus latifrons* Kohl).

Oxybelus ruficaudis Cameron 1905. Rec. Albany Mus., 1(4):208. Female.

This specimen, glued on a card, has two labels as follows:—

(1) Miss M. Daly and Miss M. Sole Grahamstown, II-03.

(2) *Oxybelus ruficaudis* Cam. Type Grahamstown. [In Cameron's handwriting.]

A third, red label has been added with HOLOTYPE ♀ *Oxybelus ruficaudis* Cameron.

The specimen is in good condition, having only the apical three segments of the right middle leg missing.

This species is common and widely distributed throughout Southern Africa.

Oxybelus capensis Cameron 1905. Rec. Albany Mus., 1(4):209. Male.

This specimen has three labels as follows:—

(1) Brak Kloof Feb. 96 Mrs. G. White.

(2) 44.

(3) *Oxybelus capensis* Cam. Type Brak Kloof. [In Cameron's handwriting.]

A fourth, red label has been added with HOLOTYPE ♂ *Oxybelus capensis* Cameron.

This specimen is in very poor condition. The gaster is glued separately on a card below the rest of the specimen. The head is missing and the wings are caked with dirt.

Arnold (1927:89) places this species as a synonym of the previous one, *Oxybelus ruficaudis* Cameron.

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